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                 and searchable
     4 JAN 27 A new search aid, the Company Name Thesaurus, available in
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NEWS 5 FEB 05 German (DE) application and patent publication number format
                 changes
     6 MAR 03 MEDLINE and LMEDLINE reloaded
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NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
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NEWS 15 APR 27 NLDB: New search and display fields available
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                 and June 2004
NEWS 18 May 12 EXTEND option available in structure searching
        May 12 Polymer links for the POLYLINK command completed in REGISTRY
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NEWS 20 May 17
                FRFULL now available on STN
NEWS 21 May 27
                STN User Update to be held June 7 and June 8 at the SLA 2004
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                New UPM (Update Code Maximum) field for more efficient patent
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        May 27
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                CAplus super roles and document types searchable in REGISTRY
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       May 27
        May 27 Explore APOLLIT with free connect time in June 2004
NEWS 24
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             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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=> s dunaliella salina

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L1 1678 DUNALIELLA SALINA

=> s (transgen? or transfor?) and 11

L2 26 (TRANSGEN? OR TRANSFOR?) AND L1

=> s bioreactor and l1

L3 28 BIOREACTOR AND L1

=> dup rem 13

PROCESSING COMPLETED FOR L3

L4 20 DUP REM L3 (8 DUPLICATES REMOVED)

=> d 1-20

L4 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

AN 2004:184518 CAPLUS

DN 140:390338

TI Milking microalga Dunaliella salina for β -carotene production in two-phase bioreactors

AU Hejazi, M. A.; Holwerda, E.; Wijffels, R. H.

CS Food and Bioprocess Engineering Group, Wageningen University, Wageningen, 6700 EV, Neth.

SO Biotechnology and Bioengineering (2004), 85(5), 475-481 CODEN: BIBIAU; ISSN: 0006-3592

PB John Wiley & Sons, Inc.

DT Journal

LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:245165 CAPLUS

TI Milking of microalgae

AU Hejazi, M. Amin; Wijffels, Rene H.

CS Food and Bioprocess Engineering Group, Wageningen University, PO Box 8129,

Wageningen, 6700 EV, Neth.

SO Trends in Biotechnology (2004), 22(4), 189-194 CODEN: TRBIDM; ISSN: 0167-7799

PB Elsevier Science Ltd.

DT Journal

LA English

L4 ANSWER 3 OF 20 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

AN 2004:91222 BIOSIS

DN PREV200400093666

TI Overcoming shear stress of microalgae cultures in sparged photobioreactors.

AU Barbosa, Maria J. [Reprint Author]; Hadiyanto; Wijffels, Rene H.

CS Food and Bioprocess Engineering Group, Wageningen University, 6700 EV, P.O. Box 8129, Wageningen, Netherlands
Maria.Barbosa@wur.nl

SO Biotechnology and Bioengineering, (January 5 2004) Vol. 85, No. 1, pp. 78-85. print.

CODEN: BIBIAU. ISSN: 0006-3592.

DT Article

LA English

ED Entered STN: 11 Feb 2004 Last Updated on STN: 11 Feb 2004

L4 ANSWER 4 OF 20 CABA COPYRIGHT 2004 CABI on STN

AN 2004:4270 CABA

DN 20033187155

TI Milking of microalgae: production and selective extraction of [beta]-carotene in two-phase bioreactors

AU Hejazi, M. A.

CS Food and Bioprocess Engineering Group, Wageningen University, Postbus 9101 6700 HB Wageningen, Netherlands.

SO Milking of Microalgae: Production and selective extraction of beta-carotene in two-phase bioreactors, (2003) pp. 128. many ref. Publisher: Wageningen Universiteit (Wageningen University). Wageningen ISBN: 90-5808-895-2

CY Netherlands Antilles

DT Dissertation

LA English

SL Persian; Dutch

ED Entered STN: 20040112 Last Updated on STN: 20040112

L4 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:261069 CAPLUS

DN 138:282341

TI Vector and transgenic **Dunaliella salina** as a bioreactor for producing drugs, vaccines and phytohormones IN Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Wang, Jianmin

PA Peop. Rep. China

SO U.S. Pat. Appl. Publ., 12 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003066107 CN 1356388	A1 A	20030403 20020703	US 2001-997445 CN 2000-131217	20011129 20001203
PRAI	CN 1410525 CN 2000-131217 CN 2001-128486	A A A	20030416 20001203 20010921	CN 2001-128486	20010921

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     2003:891505 CAPLUS
AN
DN
     140:110156
ΤI
     Effect of mixing rate on \beta-carotene production and extraction by
     Dunaliella salina in two-phase bioreactors
     Hejazi, M. A.; Andrysiewicz, E.; Tramper, J.; Wijffels, R. H.
AΠ
     Food and Bioprocess Engineering Group, Wageningen University, Wageningen,
CS
     6700 EV, Neth.
     Biotechnology and Bioengineering (2003), 84(5), 591-596
SO
     CODEN: BIBIAU; ISSN: 0006-3592
     John Wiley & Sons, Inc.
PB
DT
     Journal
     English
LΑ
              THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 16
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 7 OF 20 CABA COPYRIGHT 2004 CABI on STN
L4
AN
     2004:28320 CABA
     20033216149
DN
TΙ
     Stable expression of hepatitis B surface antigen gene in
     Dunaliella salina (Chlorophyta)
     Geng DeGui; Wang YiQin; Wang Peng; Li WenBin; Sun YongRu; Geng, D. G.;
ΑU
     Wang, Y. Q.; Wang, P.; Li, W. B.; Sun, Y. R.
CS
     Institute of Genetics and Developmental Biology, Chinese Academy of
     Sciences, Beijing, 100101, China. yrsun@genetics.ac.cn
     Journal of Applied Phycology, (2003) Vol. 15, No. 6, pp. 451-456. 21 ref.
SO
     Publisher: Kluwer Academic Publishers. Dordrecht
     ISSN: 0921-8971
CY
    Netherlands Antilles
DT
     Journal
LA
     English
     Entered STN: 20040206
ED
     Last Updated on STN: 20040206
L4
     ANSWER 8 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
AN
     2003:626197 CAPLUS
     139:363641
DN
     Effect of light intensity on \beta-carotene production and extraction by
TT
     Dunaliella salina in two-phase bioreactors
     Hejazi, M. A.; Wijffels, R. H.
ΑIJ
     Food and Bioprocess Engineering Group, Wageningen University, Wageningen,
CS
     6700 EV, Neth.
     Biomolecular Engineering (2003), 20(4-6), 171-175
SO
     CODEN: BIENFV; ISSN: 1389-0344
     Elsevier Science B.V.
PB
DT
     Journal
     English
LΑ
RE.CNT 14
              THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 9 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     2003:746578 CAPLUS
ΑN
DΝ
     140:58523
TΙ
     State and parameter estimation of microalgal photobioreactor cultures
     based on local irradiance measurement
     Su, Wei Wen; Li, Jian; Xu, Ning-Shou
     Department of Molecular Biosciences and Bioengineering, University of
     Hawaii at Manoa, Honolulu, HI, 96822, USA
SO
     Journal of Biotechnology (2003), 105(1,2), 165-178
     CODEN: JBITD4; ISSN: 0168-1656
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PB

Elsevier Science B.V.

DT Journal

LA English

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
- AN 2003:626192 CAPLUS
- DN 139:380939
- TI Marine biotechnology in education: a competitive approach
- AU Bosma, Rouke; Wijffels, Rene H.
- CS Department of Agrotechnology and Food Sciences, Food and Bioprocess Engineering Group, Wageningen University, Wageningen, 6700 EV, Neth.
- SO Biomolecular Engineering (2003), 20(4-6), 125-131 CODEN: BIENFV; ISSN: 1389-0344
- PB Elsevier Science B.V.
- DT Journal
- LA English
- RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:192828 CAPLUS
- DN 138:186457
- TI Transgenic Dunaliella salina bioreactor
- IN Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Zheng, Heming; Zhang, Guixing; Lu, Yumin; Lu, Zhaoming; Wang, Jianmin; Niu, Xiangli; Wang, Jun
- PA Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN.CNT 2

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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	CN 1356388	A	20020703	CN 2000-131217	20001203
	US 2003066107	A1	20030403	US 2001-997445	20011129
PRAI	CN 2000-131217	Α	20001203		
	CN 2001-128486	Α	20010921		

- L4 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2002:858287 CAPLUS
- DN 138:38133
- TI Cultivation of **Dunaliella salina** in an airlift photobioreactor
- AU Hao, Jian-xin; Cong, Wei; Kang, Rui-juan; Cai, Zhao-ling
- CS State Key Lab. Biochem. Eng., CAS, Beijing, 100080, Peop. Rep. China
- SO Guocheng Gongcheng Xuebao (2002), 2(5), 443-447 CODEN: CJPEB5; ISSN: 1009-606X
- PB Kexue Chubanshe
- DT Journal
- LA Chinese
- L4 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2001:127130 CAPLUS
- DN 135:45215
- TI Study on mutagen breeding of **Dunaliella salina** and its cultivation in simple axis photobioreactor
- AU Jiang, Jianguo; Zhou, Shishui; Yao, Ruhua
- CS Department of Biotechnology, South China University of Technology, Canton, 510641, Peop. Rep. China
- SO Haiyang Kexue (2001), 25(1), 44-46 CODEN: HKEXE4; ISSN: 1000-3096

- PB Kexue Chubanshe
- DT Journal
- LA Chinese
- L4 ANSWER 14 OF 20 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1999:385030 BIOSIS
- DN PREV199900385030
- TI High-density cultivation of microalgae using microencapsulation.
- AU Han, Young-Ho [Reprint author]; Lee, Jung-Suck [Reprint author]; Kwak, Jung-Ki [Reprint author]; Lee, Eung-Ho; Cho, Man-Gi [Reprint author]
- CS Engineering Research Center, Dongseo University, Pusan, 617-716, South Korea
- Journal of the Korean Fisheries Society, (March, 1999) Vol. 32, No. 2, pp. 186-191. print.

 CODEN: HSHKAW. ISSN: 0374-8111.
- DT Article
- LA Korean
- ED Entered STN: 28 Sep 1999
 Last Updated on STN: 28 Sep 1999
- L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
- AN 1997:374978 CAPLUS
- DN 127:64565
- TI Production of 13C-labeled β -carotene from **Dunaliella**
- AU Wilson, P. D. G.; Hilton, M. G.; Waspe, C. R.; Steer, D. C.; Wilson, D. R.
- CS Food Biophysics Dep., Inst. Food Res., Norwich Res. Park, Norwich, NR4 7UA, UK
- SO Biotechnology Letters (1997), 19(5), 401-405 CODEN: BILED3; ISSN: 0141-5492
- PB Chapman and Hall
- DT Journal
- LA English
- L4 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:359082 CAPLUS
- DN 125:33382
- TI Optimization of operating strategies in β -Carotene microalgae bioreactors
- AU Enes, Isabel; Saraiva, Pedro
- CS Dep. Chem. Eng., Univ. Coimbra, Coimbra, 3000, Port.
- Computers & Chemical Engineering (1996), 20(Suppl. A, European Symposium on Computer Aided Process Engineering--6, 1996), S509-S514

 CODEN: CCENDW; ISSN: 0098-1354
- PB Elsevier
- DT Journal
- LA English
- L4 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:315980 CAPLUS
- DN 125:8630
- TI Modeling and optimization of Dunaliella microalgae production reactors
- AU Enes, Isabel; Saraiva, Pedro
- CS Dept. Chemical Engineering, Univ. Coimbra, Coimbra, 3000, Port.
- SO IChemE Research Event, European Conference for Young Researchers in Chemical Engineering, 2nd, Leeds, U. K., Apr. 2-3, 1996 (1996), Volume 1, 130-132 Publisher: Institution of Chemical Engineers, Rugby, UK. CODEN: 62UFAZ
- DT Conference
- LA English
- L4 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

```
1988:628590 CAPLUS
ΑN
DN
    109:228590
    Improved phycocatalysis of carotene production by flow cytometry and cell
TΙ
    Nonomura, Arthur M.; Coder, David M.
ΑU
    Res. Dev. Div., Microbio Resour. Inc., San Diego, CA, 92121, USA
CS
    Biocatalysis (1988), 1(4), 333-8, 2 plates
    CODEN: BIOCED; ISSN: 0886-4454
DT
    Journal
LA
    English
    ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
T.4
    1987:515438 CAPLUS
NA
    107:115438
DN
    Process for producing a naturally-derived carotene/oil composition by
ΤI
    direct extraction from algae
    Nonomura, Arthur M.
IN
    Microbio Resources, Inc., USA
PA
    U.S., 6 pp.
    CODEN: USXXAM
DT
    Patent
    English
LΑ
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                                       APPLICATION NO. DATE
    PATENT NO.
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    US 4680314 A 19870714
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                    A1 19870305
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    AU 8661646
    AU 595824
                    B2 19900412
                                       IL 1986-79850 19860826
    IL 79850
                    A1 19910718
PRAI US 1985-771401
                         19850830
    US 1985-771402
                         19850830
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L4
    1985:120325 BIOSIS
AΝ
    PREV198529010321; BR29:10321
DN
    MICROBIO RESOURCES CULTIVATES ALGAE THE HIGH TECHNOLOGY WAY.
ΤI
ΑU
    PRAMIK M J
SO
    Genetic Engineering News, (1985) Vol. 5, No. 4, pp. 17.
    CODEN: GENNDX. ISSN: 0270-6377.
DT
    Article
FS
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    ENGLISH
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FILE 'CAPLUS, CABA, AGRICOLA, BIOSIS' ENTERED AT 14:58:10 ON 04 JUN 2004
L1 1678 S DUNALIELLA SALINA
L2 26 S (TRANSGEN? OR TRANSFOR?) AND L1
L3 28 S BIOREACTOR AND L1
L4 20 DUP REM L3 (8 DUPLICATES REMOVED)

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     4 JAN 27 A new search aid, the Company Name Thesaurus, available in
NEWS
                CA/CAplus
NEWS 5 FEB 05 German (DE) application and patent publication number format
                changes
NEWS 6 MAR 03 MEDLINE and LMEDLINE reloaded
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 03 FRANCEPAT now available on STN
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN
NEWS 10 MAR 29 WPIFV now available on STN
NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA
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NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field
                available
NEWS 14 APR 26 LITALERT now available on STN
NEWS 15 APR 27 NLDB: New search and display fields available
NEWS 16 May 10
                PROUSDDR now available on STN
NEWS 17 May 19
                PROUSDDR: One FREE connect hour, per account, in both May
                 and June 2004
NEWS 18 May 12 EXTEND option available in structure searching
                Polymer links for the POLYLINK command completed in REGISTRY
NEWS 19
        May 12
NEWS 20 May 17
                FRFULL now available on STN
                STN User Update to be held June 7 and June 8 at the SLA 2004
NEWS 21 May 27
                Conference
                New UPM (Update Code Maximum) field for more efficient patent
NEWS 22
        May 27
                SDIs in CAplus
                CAplus super roles and document types searchable in REGISTRY
NEWS 23 May 27
        May 27 Explore APOLLIT with free connect time in June 2004
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             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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              General Internet Information
NEWS INTER
             Welcome Banner and News Items
NEWS LOGIN
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
             CAS World Wide Web Site (general information)
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FILE 'AGRICOLA' ENTERED AT 14:58:10 ON 04 JUN 2004

FILE 'BIOSIS' ENTERED AT 14:58:10 ON 04 JUN 2004 COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

=> s dunaliella salina

L1 1678 DUNALIELLA SALINA

=> s (transgen? or transfor?) and 11

L2 26 (TRANSGEN? OR TRANSFOR?) AND L1

=> s bioreactor and 11

L3 28 BIOREACTOR AND L1

=> dup rem 13

PROCESSING COMPLETED FOR L3

L4 20 DUP REM L3 (8 DUPLICATES REMOVED)

=> d 1-20

L4 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

AN 2004:184518 CAPLUS

DN 140:390338

TI Milking microalga **Dunaliella salina** for β-carotene production in two-phase **bioreactors**

AU Hejazi, M. A.; Holwerda, E.; Wijffels, R. H.

CS Food and Bioprocess Engineering Group, Wageningen University, Wageningen, 6700 EV, Neth.

SO Biotechnology and Bioengineering (2004), 85(5), 475-481 CODEN: BIBIAU; ISSN: 0006-3592

PB John Wiley & Sons, Inc.

DT Journal

LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:245165 CAPLUS

TI Milking of microalgae

AU Hejazi, M. Amin; Wijffels, Rene H.

CS Food and Bioprocess Engineering Group, Wageningen University, PO Box 8129,

Wageningen, 6700 EV, Neth.

SO Trends in Biotechnology (2004), 22(4), 189-194 CODEN: TRBIDM; ISSN: 0167-7799

PB Elsevier Science Ltd.

DT Journal

LA English

- L4 ANSWER 3 OF 20 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 2004:91222 BIOSIS
- DN PREV200400093666
- TI Overcoming shear stress of microalgae cultures in sparged photobioreactors.
- AU Barbosa, Maria J. [Reprint Author]; Hadiyanto; Wijffels, Rene H.
- CS Food and Bioprocess Engineering Group, Wageningen University, 6700 EV, P.O. Box 8129, Wageningen, Netherlands
 Maria.Barbosa@wur.nl
- SO Biotechnology and Bioengineering, (January 5 2004) Vol. 85, No. 1, pp. 78-85. print. CODEN: BIBIAU. ISSN: 0006-3592.
- DT Article
- LA English
- ED Entered STN: 11 Feb 2004 Last Updated on STN: 11 Feb 2004
- L4 ANSWER 4 OF 20 CABA COPYRIGHT 2004 CABI on STN
- AN 2004:4270 CABA
- DN 20033187155
- TI Milking of microalgae: production and selective extraction of [beta]-carotene in two-phase bioreactors
- AU Hejazi, M. A.
- CS Food and Bioprocess Engineering Group, Wageningen University, Postbus 9101 6700 HB Wageningen, Netherlands.
- SO Milking of Microalgae: Production and selective extraction of beta-carotene in two-phase bioreactors, (2003) pp. 128. many ref. Publisher: Wageningen Universiteit (Wageningen University). Wageningen ISBN: 90-5808-895-2
- CY Netherlands Antilles
- DT Dissertation
- LA English
- SL Persian; Dutch
- ED Entered STN: 20040112 Last Updated on STN: 20040112
- L4 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:261069 CAPLUS
- DN 138:282341
- TI Vector and transgenic **Dunaliella salina** as a bioreactor for producing drugs, vaccines and phytohormones
- IN Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Wang, Jianmin
- PA Peop. Rep. China
- SO U.S. Pat. Appl. Publ., 12 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN. CNT 2

T.T.	CIVI Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003066107	A1	20030403	US 2001-997445	20011129
	CN 1356388	A	20020703	CN 2000-131217	20001203
	CN 1410525	A	20030416	CN 2001-128486	20010921
PRAI	CN 2000-131217	Α	20001203		
	CN 2001-128486	Α	20010921		

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ANSWER 6 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
AN
    2003:891505 CAPLUS
     140:110156
DN
ΤI
    Effect of mixing rate on \beta-carotene production and extraction by
    Dunaliella salina in two-phase bioreactors
    Hejazi, M. A.; Andrysiewicz, E.; Tramper, J.; Wijffels, R. H.
ΑU
    Food and Bioprocess Engineering Group, Wageningen University, Wageningen,
CS
     6700 EV, Neth.
     Biotechnology and Bioengineering (2003), 84(5), 591-596
SO
     CODEN: BIBIAU; ISSN: 0006-3592
     John Wiley & Sons, Inc.
PB
DT
     Journal
LA
     English
              THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 16
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 7 OF 20 CABA COPYRIGHT 2004 CABI on STN
L4
     2004:28320 CABA
ΑN
DN
     20033216149
     Stable expression of hepatitis B surface antigen gene in
TI
    Dunaliella salina (Chlorophyta)
     Geng DeGui; Wang YiQin; Wang Peng; Li WenBin; Sun YongRu; Geng, D. G.;
ΑU
     Wang, Y. Q.; Wang, P.; Li, W. B.; Sun, Y. R.
     Institute of Genetics and Developmental Biology, Chinese Academy of
CS
     Sciences, Beijing, 100101, China. yrsun@genetics.ac.cn
     Journal of Applied Phycology, (2003) Vol. 15, No. 6, pp. 451-456. 21 ref.
SO
     Publisher: Kluwer Academic Publishers. Dordrecht
     ISSN: 0921-8971
CY
    Netherlands Antilles
    Journal
DT
LΑ
     English
     Entered STN: 20040206
ED
    Last Updated on STN: 20040206
L4
    ANSWER 8 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
AN
     2003:626197 CAPLUS
DN
     139:363641
    Effect of light intensity on \beta-carotene production and extraction by
ΤT
    Dunaliella salina in two-phase bioreactors
ΑU
     Hejazi, M. A.; Wijffels, R. H.
     Food and Bioprocess Engineering Group, Wageningen University, Wageningen,
CS
     6700 EV, Neth.
     Biomolecular Engineering (2003), 20(4-6), 171-175
SO
     CODEN: BIENFV; ISSN: 1389-0344
    Elsevier Science B.V.
PB
DT
     Journal
    English
LΑ
RE.CNT 14
              THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 9 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     2003:746578 CAPLUS
AN
     140:58523
DN
     State and parameter estimation of microalgal photobioreactor cultures
TI
     based on local irradiance measurement
ΑU
     Su, Wei Wen; Li, Jian; Xu, Ning-Shou
     Department of Molecular Biosciences and Bioengineering, University of
CS
     Hawaii at Manoa, Honolulu, HI, 96822, USA
     Journal of Biotechnology (2003), 105(1,2), 165-178
SO
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PB

DT Journal

LA English

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
- AN 2003:626192 CAPLUS
- DN 139:380939
- TI Marine biotechnology in education: a competitive approach
- AU Bosma, Rouke; Wijffels, Rene H.
- CS Department of Agrotechnology and Food Sciences, Food and Bioprocess Engineering Group, Wageningen University, Wageningen, 6700 EV, Neth.
- SO Biomolecular Engineering (2003), 20(4-6), 125-131 CODEN: BIENFV; ISSN: 1389-0344
- PB Elsevier Science B.V.
- DT Journal
- LA English
- RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:192828 CAPLUS
- DN 138:186457
- TI Transgenic Dunaliella salina bioreactor
- IN Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Zheng, Heming; Zhang, Guixing; Lu, Yumin; Lu, Zhaoming; Wang, Jianmin; Niu, Xiangli; Wang, Jun
- PA Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN.CNT 2

	PATI	ENT NO.	KIND	DATE	API	PLICATION NO.	DATE
ΡI	CN :	1356388	A	20020703	CN	2000-131217	20001203
	US 2	2003066107	A1	20030403	US	2001-997445	20011129
PRAI	CN 2	2000-131217	Α	20001203			
	CN 2	2001-128486	Α	20010921			

- L4 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2002:858287 CAPLUS
- DN 138:38133
- TI Cultivation of **Dunaliella salina** in an airlift photobioreactor
- AU Hao, Jian-xin; Cong, Wei; Kang, Rui-juan; Cai, Zhao-ling
- CS State Key Lab. Biochem. Eng., CAS, Beijing, 100080, Peop. Rep. China
- SO Guocheng Gongcheng Xuebao (2002), 2(5), 443-447 CODEN: CJPEB5; ISSN: 1009-606X
- PB Kexue Chubanshe
- DT Journal
- LA Chinese
- L4 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2001:127130 CAPLUS
- DN 135:45215
- TI Study on mutagen breeding of **Dunaliella salina** and its cultivation in simple axis photobioreactor
- AU Jiang, Jianguo; Zhou, Shishui; Yao, Ruhua
- CS Department of Biotechnology, South China University of Technology, Canton, 510641, Peop. Rep. China
- SO Haiyang Kexue (2001), 25(1), 44-46 CODEN: HKEXE4; ISSN: 1000-3096

- PB Kexue Chubanshe
- DT Journal
- LA Chinese
- L4 ANSWER 14 OF 20 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1999:385030 BIOSIS
- DN PREV199900385030
- TI High-density cultivation of microalgae using microencapsulation.
- AU Han, Young-Ho [Reprint author]; Lee, Jung-Suck [Reprint author]; Kwak, Jung-Ki [Reprint author]; Lee, Eung-Ho; Cho, Man-Gi [Reprint author]
- CS Engineering Research Center, Dongseo University, Pusan, 617-716, South Korea
- SO Journal of the Korean Fisheries Society, (March, 1999) Vol. 32, No. 2, pp. 186-191. print.

 CODEN: HSHKAW. ISSN: 0374-8111.
- DT Article
- LA Korean
- ED Entered STN: 28 Sep 1999
 Last Updated on STN: 28 Sep 1999
- L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
- AN 1997:374978 CAPLUS
- DN 127:64565
- TI Production of 13C-labeled β -carotene from **Dunaliella**

salina

- AU Wilson, P. D. G.; Hilton, M. G.; Waspe, C. R.; Steer, D. C.; Wilson, D. R.
- CS Food Biophysics Dep., Inst. Food Res., Norwich Res. Park, Norwich, NR4 7UA, UK
- SO Biotechnology Letters (1997), 19(5), 401-405 CODEN: BILED3; ISSN: 0141-5492
- PB Chapman and Hall
- DT Journal
- LA English
- L4 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:359082 CAPLUS
- DN 125:33382
- TI Optimization of operating strategies in β -Carotene microalgae bioreactors
- AU Enes, Isabel; Saraiva, Pedro
- CS Dep. Chem. Eng., Univ. Coimbra, Coimbra, 3000, Port.
- Computers & Chemical Engineering (1996), 20(Suppl. A, European Symposium on Computer Aided Process Engineering--6, 1996), S509-S514

 CODEN: CCENDW; ISSN: 0098-1354
- PB Elsevier
- DT Journal
- LA English
- L4 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:315980 CAPLUS
- DN 125:8630
- TI Modeling and optimization of Dunaliella microalgae production reactors
- AU Enes, Isabel; Saraiva, Pedro
- CS Dept. Chemical Engineering, Univ. Coimbra, Coimbra, 3000, Port.
- SO IChemE Research Event, European Conference for Young Researchers in Chemical Engineering, 2nd, Leeds, U. K., Apr. 2-3, 1996 (1996), Volume 1, 130-132 Publisher: Institution of Chemical Engineers, Rugby, UK. CODEN: 62UFAZ
- DT Conference
- LA English
- L4 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

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AN
    1988:628590 CAPLUS
    109:228590
DN
    Improved phycocatalysis of carotene production by flow cytometry and cell
TΙ
AU
    Nonomura, Arthur M.; Coder, David M.
CS
    Res. Dev. Div., Microbio Resour. Inc., San Diego, CA, 92121, USA
SO
    Biocatalysis (1988), 1(4), 333-8, 2 plates
    CODEN: BIOCED; ISSN: 0886-4454
DT
    Journal
LA
    English
    ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
L4
    1987:515438 CAPLUS
AN
DN
    107:115438
    Process for producing a naturally-derived carotene/oil composition by
TI
    direct extraction from algae
    Nonomura, Arthur M.
IN
    Microbio Resources, Inc., USA
PA
    U.S., 6 pp.
SO
    CODEN: USXXAM
DT
    Patent
    English
FAN.CNT 2
    PATENT NO.
                   KIND DATE
                                       APPLICATION NO. DATE
    _____ ___
                                        _____
                 A 19870714
A1 19870305
                                       US 1985-771402 19850830
    US 4680314
РΤ
    AU 8661646
                                        AU 1986-61646
                                                        19860820
    AU 595824
                    B2 19900412
    IL 79850
                    A1 19910718
                                        IL 1986-79850
                                                        19860826
PRAI US 1985-771401
                          19850830
    US 1985-771402
                          19850830
L4
    ANSWER 20 OF 20 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
    1985:120325 BIOSIS
AN
    PREV198529010321; BR29:10321
DN
    MICROBIO RESOURCES CULTIVATES ALGAE THE HIGH TECHNOLOGY WAY.
ΤI
    PRAMIK M J
ΑU
    Genetic Engineering News, (1985) Vol. 5, No. 4, pp. 17.
SO
    CODEN: GENNDX. ISSN: 0270-6377.
DT
    Article
FS
    BR
LΑ
    ENGLISH
=> d his
     (FILE 'HOME' ENTERED AT 14:57:29 ON 04 JUN 2004)
     FILE 'CAPLUS, CABA, AGRICOLA, BIOSIS' ENTERED AT 14:58:10 ON 04 JUN 2004
L1
          1678 S DUNALIELLA SALINA
            26 S (TRANSGEN? OR TRANSFOR?) AND L1
L2
            28 S BIOREACTOR AND L1
L3
L4
            20 DUP REM L3 (8 DUPLICATES REMOVED)
<---->
=> dup rem 12
PROCESSING COMPLETED FOR L2
            22 DUP REM L2 (4 DUPLICATES REMOVED)
=> d 1-22
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ANSWER 1 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
L5
AN
    2003:261069 CAPLUS
DN
    138:282341
TΙ
    Vector and transgenic Dunaliella salina as a
    bioreactor for producing drugs, vaccines and phytohormones
    Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Wang, Jianmin
IN
    Peop. Rep. China
PΑ
    U.S. Pat. Appl. Publ., 12 pp.
SO
    CODEN: USXXCO
DT
    Patent
    English
LΑ
FAN.CNT 2
                     KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                                         _____
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                                                          _____
    US 2003066107
                                         US 2001-997445
                                                           20011129
PΙ
                    A1 20030403
    CN 1356388
                      A 20020703
                                         CN 2000-131217
                                                           20001203
                     A 20030416
    CN 1410525
                                          CN 2001-128486
                                                         20010921
PRAI CN 2000-131217 A 20001203
    CN 2001-128486 A 20010921
    ANSWER 2 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
T<sub>1</sub>5
    2004:35626 BIOSIS
AN
DN
    PREV200400036562
    Cloning and characterization of Hsp70a cDNA fragment of Dunaliella
ΤI
     salina.
     Jiang Guo-Zhong [Reprint Author]; Nu Xiang-Li [Reprint Author]; Lu Yu-min
ΑU
     [Reprint Author]; Xie Hua [Reprint Author]; Wang Jian-min [Reprint
     Author]; Yuan Bao-Mei [Reprint Author]; Xu Pei-Rong [Reprint Author]; Xue
     Le-Xun [Reprint Author]
     Henan Key Labroratory of Molecular Medicine, Zhengzhou University, 450052,
CS
     Zhengzhou, China
     guozhong jiang@hotmail.com; lxxue@public2.zz.ha.cn
     Yichuan, (Sep 2003) Vol. 25, No. 5, pp. 573-576. print.
SO
     ISSN: 0253-9772 (ISSN print).
DT
    Article
    Chinese
LΑ
     Entered STN: 7 Jan 2004
ED
     Last Updated on STN: 7 Jan 2004
    ANSWER 3 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
L_5
AN
    2003:904869 CAPLUS
DN
    140:265063
     Stable expression of hepatitis B surface antigen gene in
TI
     Dunaliella salina (Chlorophyta)
     Geng, Degui; Wang, Yiqin; Wang, Peng; Li, Wenbin; Sun, Yongru
AU
     Institute of Genetics and Developmental Biology, Chinese Academy of
CS
     Sciences, Beijing, 100101, Peop. Rep. China
     Journal of Applied Phycology (2003), 15(6), 451-456
SO
     CODEN: JAPPEL; ISSN: 0921-8971
     Kluwer Academic Publishers
PB
DТ
     Journal
     English
              THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 21
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
L5
AN
     2003:528393 CAPLUS
DN
     139:225144
     Transient expression of reporter gene EGFP in transformed
TΙ
     Dunaliella salina
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Li, Jie; Ren, Hong-wei; Huang, Jie-hong; Yu, Mei-min; Ru, Bing-gen

ΑU

- CS College of Life Sciences, Peking University, Beijing, 100871, Peop. Rep. China
- SO Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao (2003), 19(3), 338-342 CODEN: ZSHXF2; ISSN: 1007-7626
- PB Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao Bianweihui
- DT Journal
- LA Chinese
- L5 ANSWER 5 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 2003:305971 BIOSIS
- DN PREV200300305971
- TI 5th Conference of the Asia-Pacific International Molecular Biology Network (A-IMBN) (Part II), Shanghai, China, November 3-5, 2002.
- AU Anonymous
- SO Shengwu Huaxue yu Shengwu Wuli Xuebao, (Mar 2003) Vol. 35, No. 3, pp. 306-310. print.

Meeting Info.: 5th Conference of the Asia-Pacific International Molecular Biology Network (A-IMBN) (Part II). Shanghai, China. November 03-05, 2002. ISSN: 0582-9879 (ISSN print).

- DT Conference; (Meeting)
 - Conference; (Meeting Summary)
- LA English
- ED Entered STN: 2 Jul 2003 Last Updated on STN: 2 Jul 2003
- L5 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
- AN 2003:226025 CAPLUS
- DN 138:380132
- TI Cloning of a NaCl-induced fructose-1, 6-diphosphate aldolase cDNA from **Dunaliella salina** and its expression in tobacco
- AU Zhang, Xiaoning; Lin, Changfa; Chen, Huoying; Wang, Hao; Qu, Zhicai; Zhang, Hongwei; Yao, Jianhong; Shen, Daleng
- CS Institute of Genetics, State Key Laboratory of Genetic Engineering, Ministry of Education Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Sciences, Fudan University, Shanghai, 200433, Peop. Rep. China
- SO Science in China, Series C: Life Sciences (2003), 46(1), 49-57 CODEN: SCCLFO; ISSN: 1006-9305
- PB Science in China Press
- DT Journal
- LA English
- RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:192828 CAPLUS
- DN 138:186457
- TI Transgenic Dunaliella salina bioreactor
- IN Xue, Lexun; Pan, Weidong; Jiang, Guozhong; Zheng, Heming; Zhang, Guixing; Lu, Yumin; Lu, Zhaoming; Wang, Jianmin; Niu, Xiangli; Wang, Jun
- PA Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	CN 1356388	A	20020703	CN 2000-131217	20001203
	US 2003066107	A1	20030403	US 2001-997445	20011129
PRAI	CN 2000-131217	Α	20001203		
	CN 2001-128486	Α	20010921		

- L5 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:614783 CAPLUS
- DN 139:346514
- TI Construction of expression vector for the gene of DSG10 in **Dunaliella salina** and **transformation** into Agrobacterium tumefaciens
- AU Liu, Yang; Cao, Yi; Jiang, Yan; Qiao, Dairong; Yang, Tao
- CS College of Life Science, Sichuan University, Chengdu, 610064, Peop. Rep. China
- SO Sichuan Daxue Xuebao, Ziran Kexueban (2002), 39(6), 1149-1151 CODEN: SCTHAO; ISSN: 0490-6756
- PB Sichuan Daxue Xuebao Bianjibu
- DT Journal
- LA Chinese
- L5 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
- AN 2001:13705 CAPLUS
- DN 134:207094
- TI Comparative effects of all-trans β -carotene vs. 9-cis β -carotene on carcinogen-induced neoplastic **transformation** and connexin 43 expression in murine 10T1/2 cells and on the differentiation of human keratinocytes
- AU Hieber, A. David; King, Timothy J.; Morioka, Scott; Fukushima, Laurie H.; Franke, Adrian A.; Bertram, John S.
- CS Cancer Research Center of Hawaii, University of Hawaii, Honolulu, HI, 96813, USA
- SO Nutrition and Cancer (2000), 37(2), 234-244 CODEN: NUCADQ; ISSN: 0163-5581
- PB Lawrence Erlbaum Associates, Inc.
- DT Journal
- LA English
- RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- ANSWER 10 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
- AN 2000:9104 AGRICOLA
- DN IND22019484
- TI Molecular cloning and characterization of a cDNA encoding caltractin from **Dunaliella salina**.
- AU Ko, J.H.; Kim, J.Y.; Lee, S.H.
- CS Yonsei University, Seoul, Korea.
- SO Plant and cell physiology, Apr 1999. Vol. 40, No. 4. p. 457-461 Publisher: Kyoto, Japan: Japanese Society of Plant Physiologists. CODEN: PCPHA5; ISSN: 0032-0781
- NTE Includes references
- CY Japan
- DT Article
- FS Non-U.S. Imprint other than FAO
- LA English
- L5 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1998:660768 CAPLUS
- DN 130:22874
- TI Effect of selenium on the growth of **Dunaliella salina** and D. bardawil, and its accumulation and distribution in cells
- AU Wang, Dazhi; Gao, Yahui; Cheng, Zhaodi
- CS Department of Biology, Xiamen University, Xiamen, Peop. Rep. China
- SO Haiyang Xuebao (Zhongwenban) (1997), 19(5), 110-115

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CODEN: HYPADJ; ISSN: 0253-4193
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- PB Haiyang Chubanshe
- DT Journal
- LA Chinese
- L5 ANSWER 12 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1998:155685 BIOSIS
- DN PREV199800155685
- TI Developing a transformation system for Dunaliella.
- AU Porath, Judith Ben [Reprint author]; Gokham, Irena [Reprint author]; Lers, Amnon; Levy, Haim [Reprint author]; Zamir, Ada [Reprint author]
- CS Biochemistry Dep., Weizmann Inst., Rehovot 76100, Israel
- Phycologia, (July, 1997) Vol. 36, No. 4 SUPPL., pp. 89. print. Meeting Info.: Sixth International Phycological Congress. Leiden, Netherlands. August 9-16, 1997.

 CODEN: PYCOAD. ISSN: 0031-8884.
- DT Conference; (Meeting)
 - Conference; Abstract; (Meeting Abstract)
- LA English
- ED Entered STN: 31 Mar 1998
 Last Updated on STN: 31 Mar 1998
- L5 ANSWER 13 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1995:540059 BIOSIS
- DN PREV199598554359
- TI Effect of sodium azide on the photomovement of two Dunaliella species.
- AU Posudin, Yu. I. [Reprint author]; Masyuk, N. P.; Lilitskaya, G. G.; Shevchenko, A. A.
- CS Natl. Agrar. Univ., Goloseevo, 252041 Kiev 41, Ukraine
- SO Fiziologiya Rastenii (Moscow), (1995) Vol. 42, No. 3, pp. 432-434. CODEN: FZRSAV. ISSN: 0015-3303.
- DT Article
- LA Russian
- ED Entered STN: 14 Dec 1995 Last Updated on STN: 14 Dec 1995
- L5 ANSWER 14 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1993:527734 BIOSIS
- DN PREV199396141141
- TI Characteristics of calcium ATPase and calcium translocation of barley root plasma membrane.
- AU Hao, Lu-Ning; Yu, Shu-Wen
- CS Shanghai Inst. Plant Physiol., Academia Sinica, Shanghai 200032, China
- SO Acta Phytophysiologica Sinica, (1993) Vol. 19, No. 2, pp. 172-180. CODEN: CWSPDA. ISSN: 0257-4829.
- DT Article
- LA Chinese
- ED Entered STN: 19 Nov 1993 Last Updated on STN: 20 Nov 1993
- L5 ANSWER 15 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1993:527733 BIOSIS
- DN PREV199396141140
- TI Effect of viscosity on the functional properties of lactate dehydrogenase from **Dunaliella salina**.
- AU Saburova, E. A. [Reprint author]; Simonova, N. B.; Pronina, N. A.; Fol'kovich, T. N.; Semenenko, V. E.
- CS Inst. Theor. Exp. Biophys., Acad. Sci. Russ., Pushchino, Russia
- SO Doklady Akademii Nauk, (1992) Vol. 325, No. 6, pp. 1259-1264.
- DT Article
- LA Russian
- ED Entered STN: 19 Nov 1993

Last Updated on STN: 20 Nov 1993

- L5 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:180939 CAPLUS
- DN 116:180939
- TI Preparation of metaloproteins for cosmetics
- IN Hernadi, Gyula; Dede, Laszlo
- PA Kotai, Peter Frank, Australia
- SO Pat. Specif. (Aust.), 16 pp. CODEN: ALXXAP
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 617661	B2	19911205	AU 1988-12082	19880222
	AU 8812082	A1	19880825		
PRAI	AU 1987-511		19870224		

- L5 ANSWER 17 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1991:204730 BIOSIS
- DN PREV199191107955; BA91:107955
- TI RELATIONSHIP BETWEEN BODY SIZE GROWTH RATE AND MAXIMAL ENZYME ACTIVITIES IN THE BRINE SHRIMP ARTEMIA-FRANCISCANA.
- AU BERGES J A [Reprint author]; ROFF J C; BALLANTYNE J S
- CS DEP ZOOL, UNIV GUELPH, ONT N1G 2W1, CAN
- SO Biological Bulletin (Woods Hole), (1990) Vol. 179, No. 3, pp. 287-296. CODEN: BIBUBX. ISSN: 0006-3185.
- DT Article
- FS BA
- LA ENGLISH
- ED Entered STN: 2 May 1991 Last Updated on STN: 3 May 1991
- L5 ANSWER 18 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1990:59073 BIOSIS
- DN PREV199038025493; BR38:25493
- TI GENETIC TRANSFORMATION THROUGH PROTOPLAST FUSION IN ALGAE.
- AU LEE Y K [Reprint author]; TAN H M
- CS DEP MICROBIOL, FAC MED, NATL UNIV SINGAPORE, LOWER KENT RIDGE ROAD, SINGAPORE 0511, SINGAPORE
- (1988) pp. 101-110. STADLER, T., ET AL. (ED.). ALGAL BIOTECHNOLOGY; 4TH INTERNATIONAL MEETING OF THE SAA (SOCIETE POUR L'ALGOLOGIE APPLIQUEE), VILLENEUVE D'ASCQ CEDEX, FRANCE, SEPTEMBER 15-17, 1987. XII+521P. ELSEVIER SCIENCE PUBLISHERS LTD.: LONDON, ENGLAND, UK; NEW YORK, NEW YORK, USA. ILLUS.
 - ISBN: 1-85166-233-2.
- DT Book
 - Conference; (Meeting)
- FS BR
- LA ENGLISH
- ED Entered STN: 16 Jan 1990 Last Updated on STN: 16 Jan 1990
- L5 ANSWER 19 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1988:372734 BIOSIS
- DN PREV198886056644; BA86:56644
- TI STUDYING THE NATURE OF CELL ADAPTATION IN **DUNALIELLA**-SALINA TO CHANGES IN THE OSMOTIC PRESSURE OF THE MEDIUM.
- AU ZEINALOVA Z A [Reprint author]; KAFAR-ZADE L K; GASANOV R A; GASHIMOV R M
- CS VL KOMAROV INST BOT, ACAD SCI AZ SSR, BAKU, USSR
- SO Izvestiya Akademii Nauk Azerbaidzhanskoi SSR Seriya Biologicheskikh Nauk,

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(1987) No. 2, pp. 51-56.
      CODEN: IABLAQ. ISSN: 0132-6112.
 DΤ
      Article
 FS
      BA
 LΑ
      RUSSIAN
 ED
      Entered STN: 18 Aug 1988
      Last Updated on STN: 18 Aug 1988
      ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
 ИA
      1973:26494 CAPLUS
      78:26494
 DN
 ΤI
      Brine flagellate Dunaliella salina
 ΑU
      Loeblich, Laurel Ann
 CS
      Univ. California, San Diego, CA, USA
      (1972) 157 pp. Avail.: Univ. Microfilms, Ann Arbor, Mich., Order No.
 SO
      72-24,635
      From: Diss. Abstr. Int. B 1972, 33(3), 1033
 DT
      Dissertation
LA
      English
L5
      ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ΆN
      1971:136981 CAPLUS
DN
      74:136981
ΤI
     Content and state of nucleic acids in the alga Dunaliella
      salina depending upon sodium chloride concentration
ΑU
     Mushak, P. A.
CS
     Inst. Bot., Kiev, USSR
     Ukrains'kii Botanichnii Zhurnal (1968), 25(2), 91-5
     CODEN: UKBZAW; ISSN: 0372-4123
DT
     Journal
LΑ
     Ukrainian
T.5
     ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     1965:60835 CAPLUS
DN
     62:60835
OREF 62:10825a
     The pigments of Dunaliella salina during its
     artificial cultivation
ΑU
     Popova, R. Ts.
     Pitannya Eksperim. Botan., Akad. Nauk Ukr. RSR, Inst. Botan. (1964) 32-4
SO
DT
     Journal
LA
     Ukrainian
=>
<----> Vser Break---->
=> d his
     (FILE 'HOME' ENTERED AT 14:57:29 ON 04 JUN 2004)
     FILE 'CAPLUS, CABA, AGRICOLA, BIOSIS' ENTERED AT 14:58:10 ON 04 JUN 2004
           1678 S DUNALIELLA SALINA
L1
L2
             26 S (TRANSGEN? OR TRANSFOR?) AND L1
             28 S BIOREACTOR AND L1
L3
L4
             20 DUP REM L3 (8 DUPLICATES REMOVED)
L5
             22 DUP REM L2 (4 DUPLICATES REMOVED)
```

Refine Search

Search Results -

Terms	Documents	A-I
bioreactor and L4	3	M
		 L

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database

Database:

EPO Abstracts Database JPO Abstracts Database Derwent World Patents Index

IBM Technical Disclosure Bulletins

Recall Text =

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Clear

Refine Search

Interrupt

Search History

DATE: Friday, June 04, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=EPA	B,JPAB,DWPI; PLUR=Y	ES; OP=OR	
<u>L7</u>	bioreactor and 14	3	<u>L7</u>
<u>L6</u>	bioreactor and 13	0	<u>L6</u>
<u>L5</u>	bioreactor L4	3754	<u>L5</u>
<u>L4</u>	dunaliella adj salina	38	<u>L4</u>
<u>L3</u>	11	0	<u>L3</u>
DB = USP	T; PLUR=YES; OP=OR		
<u>L2</u>	bioreactor and L1	7	<u>L2</u>
<u>L1</u>	dunaliella adj salina	46	<u>L1</u>

END OF SEARCH HISTORY

Hit List

Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

Search Results - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 6602703 B2

L2: Entry 1 of 7

File: USPT

Aug 5, 2003

US-PAT-NO: 6602703

DOCUMENT-IDENTIFIER: US 6602703 B2

TITLE: Photobioreactor

DATE-ISSUED: August 5, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Dutil; Frederic

Quebec

CA

US-CL-CURRENT: 435/292.1; 15/104.04, 15/88, 165/95, 165/DIG.4, 435/420

Full Title Citation Front Review Classification Date Reference Structure (Structure) Claims KMC Draw. De

☐ 2. Document ID: US 6000551 A

L2: Entry 2 of 7

File: USPT

Dec 14, 1999

US-PAT-NO: 6000551

DOCUMENT-IDENTIFIER: US 6000551 A

TITLE: Method for rupturing microalgae cells

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Kanel; Jeffrey Scott

Kingsport

TN

Guelcher; Scott Arthur

Weirton

WV

US-CL-CURRENT: $\underline{209/164}$; $\underline{209/169}$, $\underline{209/170}$, $\underline{210/221.2}$, $\underline{210/703}$, $\underline{241/1}$, $\underline{241/2}$, $\underline{241/301}$, $\underline{435/257.1}$, $\underline{435/259}$, $\underline{435/306.1}$, $\underline{47/1.4}$

Full Title Citation Front Review Classification Date Reference

☐ 3. Document ID: US 5951875 A

L2: Entry 3 of 7

File: USPT

Sep 14, 1999

US-PAT-NO: 5951875

DOCUMENT-IDENTIFIER: US 5951875 A

TITLE: Adsorptive bubble separation methods and systems for dewatering suspensions

of microalgae and extracting components therefrom

DATE-ISSUED: September 14, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Kanel; Jeffrey Scott Guelcher; Scott Arthur

Kingsport

TN

Weirton VA

US-CL-CURRENT: 210/703; 210/768, 210/770, 210/806, 241/1, 241/2, 241/24.11, $\underline{241/301}$, $\underline{435/257.1}$, $\underline{435/259}$, $\underline{435/306.1}$, $\underline{47/1.4}$

Full Title Citation Front Review Classification Date Reference Claims KWC Draw, De

☐ 4. Document ID: US 5910254 A

L2: Entry 4 of 7

File: USPT

Jun 8, 1999

US-PAT-NO: 5910254

DOCUMENT-IDENTIFIER: US 5910254 A

TITLE: Method for dewatering microalgae with a bubble column

DATE-ISSUED: June 8, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE COUNTRY

Guelcher; Scott Arthur

Weirton

WV

Kanel; Jeffrey Scott

Kingsport

TN

US-CL-CURRENT: 210/703; 209/164, 435/67, 435/946, 47/1.4, 514/458, 514/725

Full Title Citation Front Review Classification Date Reference Claims KMC Draw De

☐ 5. Document ID: US 5776349 A

L2: Entry 5 of 7

File: USPT

Jul 7, 1998

US-PAT-NO: 5776349

DOCUMENT-IDENTIFIER: US 5776349 A

TITLE: Method for dewatering microalgae with a jameson cell

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

NAME

CITY

ZIP CODE STATE

COUNTRY

Guelcher; Scott Arthur

Weirton

WV

Kanel; Jeffrey Scott

Kingsport

TN

US-CL-CURRENT: 210/703; 209/164, 435/67, 435/946, 47/1.4, 514/458, 514/725

Full Title Citation Front Review Classification Date Reference

☐ 6. Document ID: US 5310554 A

L2: Entry 6 of 7

File: USPT

May 10, 1994

Claims KMC Draw De

US-PAT-NO: 5310554

DOCUMENT-IDENTIFIER: US 5310554 A

TITLE: High purity beta-carotene

DATE-ISSUED: May 10, 1994

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

ZIP CODE

COUNTRY

Haigh; W. Geoffrey

Seattle

WA

Full Title Citation Front Review Classification Date Reference

US-CL-CURRENT: 424/439; 424/195.17, 424/452, 424/464, 424/489, 585/825

☐ 7. Document ID: US 4680314 A

L2: Entry 7 of 7

File: USPT

Jul 14, 1987

US-PAT-NO: 4680314

DOCUMENT-IDENTIFIER: US 4680314 A

TITLE: Process for producing a naturally-derived carotene/oil composition by direct

extraction from algae

DATE-ISSUED: July 14, 1987

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Nonomura; Arthur M.

Del Mar

CA

US-CL-CURRENT: <u>514/725</u>; <u>514/458</u>

Full Title Citation Front Review Classification Date Reference Claims KWC Draw, De

Clear	Generate Collection	Print Fwd Refs		Generate OACS
	Terms		Documents	
<u>[t</u>	pioreactor and L1			7

Display Format: CIT Change Format

Previous Page Next Page Go to Doc#

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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: ES 2193860 A1

Using default format because multiple data bases are involved.

L7: Entry 1 of 3

File: DWPI

Nov 1, 2003

DERWENT-ACC-NO: 2004-074181

DERWENT-WEEK: 200408

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TITLE: Cultivation of saline micro algae in a photo bioreactor consists of biomass

and carotenoid production in a weatherproof tube

PRIORITY-DATA: 2001ES-0002805 (December 17, 2001)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES :

MAIN-IPC

ES 2193860 A1

November 1, 2003

001

C12N001/12

INT-CL (IPC): C12 N 1/12; C12 N 1/12; C12 R 1:89

□ 2. Document ID: US 20030066107 A1, CN 1410525 A

L7: Entry 2 of 3

File: DWPI

Apr 3, 2003

DERWENT-ACC-NO: 2003-644712

DERWENT-WEEK: 200361

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Novel transgenic Dunaliella salina bioreactor useful for producing drugs,

vaccines and phytohormones for humans and animals

INVENTOR: JIANG, G; PAN, W; XUE, L; WANG, J

PRIORITY-DATA: 2001CN-0128486 (September 21, 2001), 2000CN-0131217 (December 3,

2000)

PATENT-FAMILY:

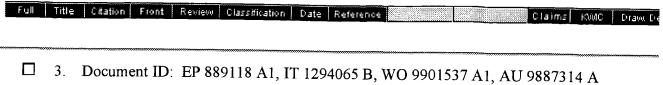
 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 US 20030066107 A1
 April 3, 2003
 012
 A01H005/00

 CN 1410525 A
 April 16, 2003
 000
 C12N001/13

INT-CL (IPC): $\underline{\text{A01}}$ $\underline{\text{H}}$ $\underline{\text{5}}/\underline{\text{00}}$; $\underline{\text{A61}}$ $\underline{\text{K}}$ $\underline{\text{39}}/\underline{\text{29}}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{\text{1}}/\underline{\text{13}}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{\text{15}}/\underline{\text{51}}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{\text{15}}/\underline{\text{62}}$; $\underline{\text{C12}}$ $\underline{\text{N}}$

15/79



L7: Entry 3 of 3

File: DWPI

Jan 7, 1999

DERWENT-ACC-NO: 1999-062653

DERWENT-WEEK: 200154

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Bioreactor for growth of photosynthetic molecules - generates surface waves in liquid culture to circulate cells between surface and deeper layers of culture

to increase yield

INVENTOR: DI GIUSEPPE, S D; DI GIUSEPPE STEFANORI, D

PRIORITY-DATA: 1997IT-PG00017 (July 4, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 889118 A1	January 7, 1999	E	800	C12M001/00
IT 1294065 B	March 22, 1999		000	C12N000/00
WO 9901537 A1	January 14, 1999	E	000	C12M001/00
AU 9887314 A	January 25, 1999		000	C12M001/00

INT-CL (IPC): $\underline{\text{C12}}$ $\underline{\text{M}}$ $\underline{1}/\underline{00}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{0}/\underline{00}$

Full Title Citation Front Review Classification Date	Reference Claims FOMC Draw, Dr
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	Nd Refs Generate OACS
Terms	Documents
bioreactor and L4	3

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